



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/487,361	01/19/2000	William Geoghegan	SYNC-001/01US	3076

22903 7590 06/05/2003

COOLEY GODWARD LLP
ATTN: PATENT GROUP
11951 FREEDOM DRIVE, SUITE 1700
ONE FREEDOM SQUARE- RESTON TOWN CENTER
RESTON, VA 20190-5061

EXAMINER

PORTER, RACHEL L

ART UNIT PAPER NUMBER

3626

DATE MAILED: 06/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/487,361

Applicant(s)

GEOGHEGAN ET AL.

Examiner

Rachel L. Porter

Art Unit

3626

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 11-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 12 November 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Notice to Applicant

1. This communication is in response to the Amendment filed 11/12/02. Claims 1-21 are pending. Claims 1-3 have been amended. Claims 4-21 are newly added.

Drawings

2. The objections to the drawings are hereby withdrawn due to the amendments and proposed drawing correction filed 11/12/02.

Specification

3. The amendment filed 11/12/02 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: The newly recited "organizing an inventory of hotel rooms as a plurality of attribute combinations...determining whether a room request can be met from said inventory based on a number of rooms available for each identified attribute combination" (claim 5); "adjusting said number of rooms... if said request can be met from said inventory" (claim 6); "denying a request..." (claim 7); "said number of rooms available includes an allowed number overbooked rooms" (claim 8); "said...rooms available is based upon

forecast demand" (claim 9); "wherein said first room rate is further based on said number of rooms available." (claim 10).

In particular, the Applicant does not point to, nor was the Examiner able to find, any support for this newly added claim language within the specification as originally filed. As such, the Applicant is respectfully requested to clarify the above issues and to specifically point out support for the newly added limitations in the originally filed specification and claims, or to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 5-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 5-10 recite limitations that are new matter, as discussed in the specification objection (paragraph 3 of the present Office Action), and are therefore rejected.

Claim Objections

6. The objections to claims 1 and 2 for informalities are hereby withdrawn due to the amendment filed 11/12/02.

Election/Restrictions

7. Newly submitted claims 11-21 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons:

- I. Claims 1-10, are drawn to coordination of plural reservations, classified in class 705, subclass 6.
- II. Claims 11-21, drawn to inventory management, classified in class 705, subclass 28.

8. Inventions I (claims 1-10) and II (claims 11-21) are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention II has separate utility such as a system for monitoring inventory for travel accommodations. See MPEP § 806.05(d).

9. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

10. Since applicant has received an action on the merits for the originally presented invention (Group I), this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 11-21 are withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

NOTE: The art rejections of claims 5-10 are provided hereinbelow for the Applicant's consideration on the condition that the Applicant properly point out support for the new limitations in the originally filed disclosure in the next communication sent in response to the present Office Action.

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tagawa (US Patent No. 5,732,39) in view of "Red Roof Inns Implements. . ." (referred to hereinafter as Red) for the same reasons provided in the previous Office Action (Paper No. 7).

(A) Claims 1 and 2 have been amended to correct typographical errors in the original claim language as set forth in Paper No. 7. However, these changes do not affect the scope and breadth of the claim as originally presented and/or interpreted by the Examiner when applying prior art within the previous Office Action (Paper No. 7). As such, these limitations are rejected under the same rationale given in the previous Office Action, and incorporated herein.

(B) Claim 3 has not been amended and as such, is rejected for the same reasons given in the previous Office Action (Paper No. 7), and incorporated herein.

13. Claims 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tagawa in view of Red.

As per claim 4, Tagawa and Red teach the method of claim 1 as explained in the rejection of claim 1. Furthermore, Tagawa teaches a method, wherein said room request includes arrival date, a length of stay, and at least one room attribute. (Tagawa: col. 12, lines 35-58) The user inputs the arrival date (i.e. check-in date), length of stay (i.e. check-in and check-out dates) and room attributes (i.e. hotel preference; lodging category).

14. Claims 5-7 and 9-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tagawa and Red as applied to claims 1 and 4, and further in view of Kerr et al (USPN 5,404,291).

As per claim 5, Tagawa and Red in combination teach the method of claim 4 as explained in the rejections of claim 1 in the previous Office Action (Paper No. 7) and claim 4 in the present Office Action. Tagawa further discloses a method of processing a customer room request, but does not specifically disclose the details of organizing hotel inventory based on room attributes to coordinate customer reservations. Kerr discloses a method of processing the hotel inventory and responding to room requests further comprising the steps of:

- organizing an inventory of hotel rooms as a plurality of attribute combinations, wherein a first attribute combination (room-rate type "ij") represents a second attribute combination (rate-category "i") and a third attribute combination (room-type "j"), wherein said second attribute combination is different from

said third attribute combination; (Kerr: col. 3, lines 12-23; col. 125, lines 16-60; col. 126, lines 55-67)

- determining a number of rooms in said inventory represented by each of said attribute combinations; (Kerr: col. 3, line 55-col. 4, line 3)
- identifying each of said plurality of attribute combinations that corresponds to said at least one room attribute in said room request; and (Kerr: Figure 2; col. 5, lines 18-24; col. 6, lines 15-24)
- determining whether said room request can be met from said inventory based on a number of rooms available for each identified attribute combination.

(Kerr: Figure 2; col. 5, lines 18-24; col. 7, lines 4-19)

At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to further modify the method of Tagawa and Red in combination with the teaching of Kerr to analyze availability information based on room attribute information in a customer reservation request. As suggested by Kerr, one would have been motivated to do this to accommodate customer preferences (col. 4, lines 4-12) and to facilitate reservation management by offering more accurate chain inventory status, and to ultimately maximize hotel profits. (col. 2, lines 7-19)

As per claim 6, Tagawa and Red disclose a method for processing customer reservation requests as explained in the rejection of claims 1 and 4, but do not specifically disclose adjusting the number of available rooms if a customer request can be met. However, Tagawa does disclose verifying up-to-date (i.e. real-time) hotel vendor inventory before accepting a customer reservation request (Tagawa: col.

Art Unit: 3626

13,lines 32-43). Tagawa further discloses a system that updates the inventory of other travel accommodations (i.e. car rentals) when it is determined that a customer request can be met. (col. 13, lines 62-66). Kerr teaches a method further comprising the step of adjusting said number of rooms available for each identified attribute combination if said room request can be met from said inventory. (Kerr: Figure 2; col. 3, lines 3-23—System checks the inventory of the room to determine if it can be sold to a requestor and updates the inventory accordingly.) At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to further modify the method of Tagawa and Red in combination with the teaching of Kerr to update (i.e. adjust) availability information based on whether a customer reservation request can be met. As suggested by Kerr, one would have been motivated to do this to accommodate customer preferences (col. 4,lines 4-12) and to improve the accuracy of chain inventory status. (col. 2, lines 7-19)

As per claim 7, Tagawa, Red, and Kerr teach the method of claim 5 as explained in the rejection of claim 5. Tagawa and Red do not specifically disclose the details of declining a room request. Kerr teaches a method further comprising denying a room request if the room request cannot be met from the inventory. (Kerr: col. 3, lines 40-col. 6, line 61-col. 7, line 9) Kerr discloses that the reservation manager may set maximum levels for each rate type, room type and rate/room combination and further discloses that before a sale is completed in response to a request, availability information must be verified. It is respectfully submitted that one of ordinary skill in the art would have understood that this results of this verification process would include the acceptance of

Art Unit: 3626

a request if the availability rules are not violated (i.e. inventory is sufficient) or the denial of a room request if the availability rules are violated (i.e. if request cannot be met from the available inventory). At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the method of Tagawa and Red with the teaching of Kerr to deny a room request if the request cannot be met by the inventory. One would have been motivated to do this to provide timely notification to the traveler that other arrangements are necessary, thus minimizing customer inconvenience and dissatisfaction with the hotel chain.

As per the limitations of claims 9-10, Tagawa discloses a method for receiving a customer request for a hotel room (Tagawa: col. 12, line 31-col. 13, line 43,) but does not disclose the use of forecast demand or determining room rates based upon room availability. Red discloses a method wherein the number of rooms available is based on forecast demand and wherein the room rate (i.e. first room rate) is based upon the number of rooms available (i.e. occupancy rate). (Red: paragraphs 1 and 2) At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to modify the method of Tagawa with the teaching of Red to determine the number of available rooms based on forecast demand and to determine price based upon room availability. As suggested by Red, one would have been motivated to do this so hotels could set room rates that would maximize revenues under various forecasted market demand conditions and according to what the market will bear. (Red, paragraph 2)

Art Unit: 3626

15. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tagawa, Red, and Kerr as applied to claim 6 above, and further in view of Jung et al (USPN 4,775, 936).

As per claim 8, Tagawa, Red and Kerr teach the method of claim 6 as explained in the rejection of claim 6. Tagawa, Red, and Kerr do not specifically teach that the number of rooms includes an allowed number of overbooked rooms, but Red does disclose a method that makes recommendations regarding overbooking opportunities. (Red: paragraph 1) Jung discloses a system wherein the available inventory includes an allowed overbooking level for the inventory (e.g. number of overbooked rooms, seats, fleet vehicles). (col. 2, lines 29-53; col. 4, lines 56-col. 5, line 30; col. 9, line 64-col. 10, line 5) At the time of the Applicant's invention, it would have been obvious to one of ordinary skill in the art to further modify the method of Tagawa, Red, and Kerr with the teaching of Jung to include an allowed number of overbooked rooms among the number of rooms available. As suggested by Jung, one would have been motivated to do this to maximize profits by using the total capacity of the hotel and to guard against the potential loss in revenue caused by "no-shows." (col. 1, lines 14-36; col. 9, line 64-col. 10, line 5)

Response to Arguments

16. Applicant's arguments filed 11/12/02 have been fully considered but they are not persuasive.

(A) On page 11, line 20- page 12 line 17, the Applicant argues that the combination of Tagawa in view of Red Roof provided in the rejection of claim 1 is improper because the

Art Unit: 3626

combination fails to teach or suggest all the claim limitations. The Applicant further explains the argument by stating that the art of record does not teach or suggest “determining a first room rate for a first guest based on a comparison between the guest information and historical information associated with similar guests and a comparison between said first room request and a forecast demand for similar requests, said forecast demand based on historical data.”

In response to applicant's argument that the applied combination would not have been obvious and does not meet all claim limitations, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).

In the instant case, the Examiner has relied on the Tagawa reference which discloses the most of the limitations recited in claim 1, but fails to expressly disclose the forecast demand aspect of the price determination for the guest room request. The Red Roof reference teaches the use of a revenue management system for hotel reservations that analyzes (i.e. compares) current and historical data on room requests and guest occupancy (i.e. guest information) to forecast room demand and to determine room rates. (Red, paragraph 1) While the Examiner has acknowledged in the previous Office Action that “Red” does not expressly disclose that the current and historical data used in the analysis is data associated with similar guests, at the time of the Applicant’s

invention, it would have been obvious to one of ordinary skill in the art to base a demand forecast and analyses of current and historical information on similar customers. As explained in the previous Office Action, one would have been motivated to base these analyses on similar guests to ensure that the analyses and resulting forecast demand are as accurate and detailed as possible and to ensure that the rooms are sold to the appropriate guest at the best price. (Red, paragraph 2).

Moreover, it is respectfully submitted that one of ordinary skill in the in art would have understood that the current and historical information that is processed by the TEMPO system, which includes the demand for a particular room, on a particular day, and at a particular inn, would include information on "similar" customers with "similar" room requests. (Red, paragraph 1) Customers may be deemed similar merely because they are requesting hotel accommodations; room requests may be considered similar simply because they include requests for rooms at the same hotel or chain of hotels. In light of the fact that the claim language provides no specific definition or explanation on how customers are determined to be "similar" to one another, the Examiner has given the claim the broadest reasonable interpretation and has applied art accordingly. As such, claim 1 is rejected for the same reasons provided in the previous Office Action, and as further explained in the present Office Action.

(B) On page 12, lines 18-page 13, line 8, the Applicant asserts that the Examiner has failed to establish a *prima facie* case of obviousness regarding claims 2 and 3 and that the Examiner has failed to address the deficiencies of the art of record in meeting each and every claim limitation.

In response to applicant's argument that each and every limitation of claims 2 and 3 has not been addressed, the test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed invention must be expressly suggested in any one or all of the references. *Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981).* The Examiner has relied upon a combination of references (Tagawa in view of "Red") that fairly suggest the Applicant's claimed invention.

While Tagawa may not expressly disclose the method as it applies to a handling a room request from a second guest, it is respectfully submitted that one of ordinary skill in the art at the time of the Applicant's invention would have understood that the method taught by Tagawa (receiving room request data, analyzing current and historical data to forecast demand and to determine a room rate) accommodates one or more users (i.e. first guest, second guest, third guest. . .) making a (hotel) reservation. Moreover, the Tagawa reference was combined with the Red reference, which specifically discloses a system that allows hoteliers to analyze (i.e. compare) current and historical data on room requests and guest occupancy (i.e. guest information) to forecast room demand and to determine room rates that maximize reservations and *revenues* (Red, paragraph 1). It is respectfully submitted that one of ordinary skill in the art would have understood that this meant that the different room rates could be offered to various customers.

In addition, one of ordinary skill in the art would have understood that the current and historical information that is processed by the TEMPO system, which includes the demand for a particular room, on a particular day, and at a particular inn, would include information on "similar" customers with "similar" room requests. (Red, paragraph 1) Customers may be deemed similar merely because they are requesting hotel accommodations; room requests may be considered similar simply because they include requests for rooms at the same hotel or chain of hotels.

A combination of references, Tagawa in view of Red, has been relied upon to address the limitations in the current language of claims 2 and 3. It is respectfully submitted that an explanation based on logic and reasoning of one of ordinary skill in the art at the time of the Applicants' invention that support a holding of obviousness has been adequately provided by the reference citations and motivations provided in the previous Office Action (Paper No. 7) and as further explained in the present Office Action. As such, the rejections of claims 2 and 3 are maintained.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Talluri (USPN 6,263,315) teaches a revenue management system that denies or accepts customer requests based upon net revenue thresholds.

- Lince (USPN 3,656,113) teaches a system for monitoring hotel rooms based upon room category.

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rachel L. Porter whose telephone number is 703-305-0108. The examiner can normally be reached on M-F, 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on (703)305-9588. The fax phone numbers for the organization where this application or proceeding is assigned are (703)305-7687 for regular communications and (703)305-7687 for After Final communications.

Art Unit: 3626

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-1113.

RP
RP
May 31, 2003


JOSEPH THOMAS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600